

LPDES PERMIT NO. LA0042510, AI No. 1617

LPDES STATEMENT OF BASIS  
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** Lafourche Sugars, LLC  
Leighton Factory  
141 Leighton Quarters Road  
Thibodaux, Louisiana 70301
- II. **Issuing Office:** Louisiana Department of Environmental Quality  
(LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd  
Industrial Permits Section  
Water Permits Division  
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**Date Prepared:** September 3, 2009

IV. **Permit Action/Status:**

A. **Reason For Permit Action:**

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301, 4901, and 4903.

- B. LPDES permit - LPDES permit effective date: June 1, 2004  
LPDES permit expiration date: May 31, 2009  
EPA has not retained enforcement authority.

- C. Application received on February 27, 2009 with additional information received via e-mail correspondence on September 9, 2009 and October 24, 2009.

V. **Facility Information:**

- A. **Location -** 141 Leighton Quarters Road in Thibodaux, Lafourche Parish (Latitude 29°47'53", Longitude 90°51'22")

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B. Applicant Activity - According to the application, Lafourche Sugars, LLC, Leighton Factory, is a raw cane sugar mill which produces raw sugar and blackstrap molasses.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Raw Cane Sugar Processing

Reference

LAC 33:IX.707.D.3.b

Other sources of technology based limits:

Current LPDES permit (effective June 1, 2004)

TMDL for Dissolved Oxygen and Nutrients in Selected Subsegments in the Middle Terrebonne Basin (finalized April 2, 2008)

Best Professional Judgement

D. Fee Rate -

1. Fee Rating Facility Type: Minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC code: 2061

VI. Receiving Waters:

STREAM - 80 Arpent Canal via an unnamed drainage ditch

BASIN AND SUBSEGMENT - Terrebonne Basin, Subsegment No. 120202

DESIGNATED USES - a. primary contact recreation  
 b. secondary contact recreation  
 c. fish and wildlife propagation  
 d. drinking water supply

VII. Outfall Information:

Outfall 002

- A. Type of wastewater - process wastewaters (comprised of overflow from the cane washwater pond, blowdown from the barometric condenser cooling water and condensate spray pond, and equipment and mill floor washwater); boiler blowdown; sanitary wastewater; and stormwater runoff
- B. Location - at the point of discharge at the subsurface pipe from the holding pond prior to combining with any other waters at Latitude 29°47'45", Longitude 90°51'30".

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- C. Treatment - treatment of these wastewaters consists of:
  - aeration
  - stabilization
- D. Flow - Seasonal, (Max 30-Day) 1.17 MGD
- E. Receiving waters - 80 Arpent Canal via an unnamed drainage ditch
- F. Basin and subsegment - Terrebonne Basin, Subsegment No. 120202

#### VIII. Proposed Permit Limits:

Summary of Proposed Changes From the Current LPDES Permit:

- A. According to the permittee's previous permits, this facility is subject to the Best Practical Treatment as cited in the Water Quality Regulations at LAC 33:IX.707.D.2.b. However, since BPT was superseded by Best Conventional Technology (BCT), the Water Quality Regulations cited at LAC 33:IX.707.D.3.b are applicable and in effect. Although the level of control technology applicable to this facility has changed, there will be no change in the basis of the limits since BCT is equivalent to BPT under the Water Regulations for Sugar Mill facilities.
- B. In an effort to adequately evaluate the discharge, a provision requiring the submittal of analytical data not provided in the 2009 Application will be added to the reopener clause in Part II.H of the permit. This provision requires the facility to submit analytical data for this facility within one (1) year after the effective date of the permit in accordance with Section III.C.4 of the IND Application as required by the Water Quality Regulations. Upon submittal of the analytical data, the LDEQ may choose to modify this permit to change the effluent limits based on this information.
- C. The provision in the Part II conditions that required submittal of DMRs to the appropriate Regional Office will be removed from the permit since all DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are now scanned into EDMS which is accessible to all LDEQ personnel.

#### IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

1. Outfall 002 - process wastewaters (comprised of overflow from the cane washwater pond, blowdown from the barometric condenser cooling water

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and condensate spray pond, and equipment and mill floor washwater); boiler blowdown; sanitary wastewater; and stormwater runoff

Lafourche Sugars, LLC, Leighton Factory is subject to the Best Conventional Pollutant Control Technology (BCT) effluent limitation guideline listed below:

Manufacturing Operation

Guideline

Raw Cane Sugar Processing

LAC 33:IX.707.D.3.b

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	1/day
BOD <sub>5</sub>	185	369	---	---	1/week
TSS	591	1773	---	---	1/week
Dissolved Oxygen	---	---	Report (Avg)	Report (Min)	1/week
pH (Standard Units)	---	---	6.0 (Min)	9.0 (Max)	1/week

(\*1) When discharging.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements are consistent with the current permit.

BOD<sub>5</sub> and TSS - mass limits in the current permit are based on the Water Quality Regulations cited at LAC 33:IX.707.D.3.b using the tons of sugar cane processed during the 2002 grinding season and the number of days of production. The calculations are provided below:

Tons of Sugar Cane Processed in 2002: 738,616.85 tons  
Number of Days of Production: 100 days

To determine the production rate (tons/day), the following calculation was performed below:

$$738,616.85 \text{ tons}/100 \text{ days} = 7,386.2 \text{ tons/day}$$

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Based on this information, the mass limits were calculated using the following equation:

Production Rate (tons/day) \* Production-Based Factor (lbs/ton) =  
mass limit (lbs/day)

BOD<sub>5</sub> Limits

Daily Maximum

7,386.2 tons/day \* 0.05 lbs/ton = 369 lbs/day

Monthly Average

7,386.2 tons/day \* 0.025 lbs/ton = 185 lbs/day (after rounding)

TSS Limits

Daily Maximum

7,386.2 tons/day \* 0.24 lbs/ton = 1773 lbs/day (after rounding)

Monthly Average

7,386.2 tons/day \* 0.08 lbs/ton = 591 lbs/day (after rounding)

To determine the limits for the proposed permit, the same methodology was taken into account using the tons of sugar cane processed during the 2008 grinding season and the number of days of production. The calculations are provided below:

Tons of Sugar Cane Processed in 2008: 828,300 tons  
Number of Days of Production: 71 days

To determine the production rate (in tons/day), the following calculation was performed below:

828,300 tons/71 days = 11,666.2 tons/day

Based on this information, the proposed mass limits were calculated as follows:

BOD<sub>5</sub> Limits

Daily Maximum

11,666.2 tons/day \* 0.05 lbs/ton = 583 lbs/day

Monthly Average

11,666.2 tons/day \* 0.025 lbs/ton = 292 lbs/day (after rounding)

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### TSS Limits

#### Daily Maximum

11,666.2 tons/day \* 0.24 lbs/ton = 2,800 lbs/day (after rounding)

#### Monthly Average

11,666.2 tons/day \* 0.08 lbs/ton = 933 lbs/day

However, since the current mass limits were more stringent than the proposed mass limits, the current limits will be retained in the draft permit as a result of the *TMDL for Dissolved Oxygen and Nutrients in Selected Subsegments in the Middle Terrebonne Basin* which was finalized on April 2, 2008. Based on the TMDL assessment, no reductions from point source dischargers were required. Therefore, it was assumed that the point sources may continue to discharge under their current limits and not cause any adverse effects on the water quality of the receiving stream.

DO - monitoring requirements are based on BPJ using the current permit.

PH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements are consistent with the current permit.

### STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. **For first time permit issuance**, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

### TMDL Waterbodies

Subsegment No. 120202 of the Terrebonne Basin is not listed on the 2006 Final Integrated 303(d) List as impaired since the all of the Total Maximum Daily Loading (TMDL) assessments have been completed for this

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subsegment. The pollutants of concern were Phosphorus, Nitrate + Nitrite, and Organic Enrichment/Low Dissolved Oxygen (DO). The *TMDL for Dissolved Oxygen and Nutrients in Selected Subsegments in the Middle of the Terrebonne Basin* was finalized on April 2, 2008. Based on the results of these TMDL assessments, no reductions from point source dischargers were required. Therefore, the limits will be retained from the current permit.

**X. Compliance History/DMR Review:**

- A. LDEQ records were reviewed for the period of July 2004 through August 2009. No water enforcement actions were issued during this time period. However, an air enforcement action (AE-CN-08-0178) was issued to this facility on October 7, 2008. There are no other open enforcement actions listed for this facility under any other media during this time period.
- B. A DMR review of the monitoring reports covering the monitoring period of July 2004 through August 2009 revealed that there were no effluent violations. However, there were two DMR deficiencies noted during the course of the review. The DMR deficiencies included: (1) the DMR for June and July 2008 did not contain a date and (2) the DMR for July 2008 did not contain sample data or indicate that no discharges occurred.
- C. The most recent inspection was conducted on May 3, 2007. There were no areas of concern noted in the inspection report.

**XI. Endangered Species:**

The receiving waterbody, Subsegment No. 120202 of the Terrebonne Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

**XII. Historic Sites:**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana

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State Historic Preservation Officer is required.

**XIII. Tentative Determination:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

**XIV. Public Notices:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List